

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003977**Date Inspected:** 19-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yan Hua**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the Production Monitoring Test (PMT) for Orthotropic Box Girder (OBG) Deck panels, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Sub Assembly Shop Bay 1:

Gantry #2/ PMT # 1 & 2

The Caltrans QA Inspector monitored the OBG Production Monitoring Test (PMT) for Deck Panels DP416-001 and DP335-002. Prior to GMAW welding visual inspection of tack welds and fit were performed by ZPMC, ABF and CT. After SAW cover pass ZPMC QC Mr. Li Yan Hua rejected the 1st PMT for an area of overlap measuring 180 mm on weld 6. ZPMC moved the 2nd PMT to Gantry # 2 for grinding of tack welds. ZPMC QC Mr. Xu Hai performed MT of tack welds and no relevant indications were reported. After completion of the GMAW root pass ZPMC personnel were observed grinding tack weld locations of the GMAW pass to make the weld uniform prior to SAW welding. The Caltrans QA inspector recorded amperage, voltage and travel speed of the Gas metal Arc Welding (GMAW) root pass and the Submerged Arc Welding (SAW) cover pass. A Visual inspection of the root pass and cover pass was performed by ZPMC, American Bridge Flour (ABF) and the Caltrans QA. The Caltrans QA observed ZPMC QC Xue Hai Rong perform Ultrasonic testing of the Partial Joint Penetration weld for depth of penetration. Mr. Xue found the depth of penetration of the PMT welds to be in compliance with contract documents. ZPMC did not complete Macroetch preparation for evaluation for the night shift. ZPMC QC Fu Yuhong stated that the samples would ready for day shift to evaluate. Please see the attached photo of overlap

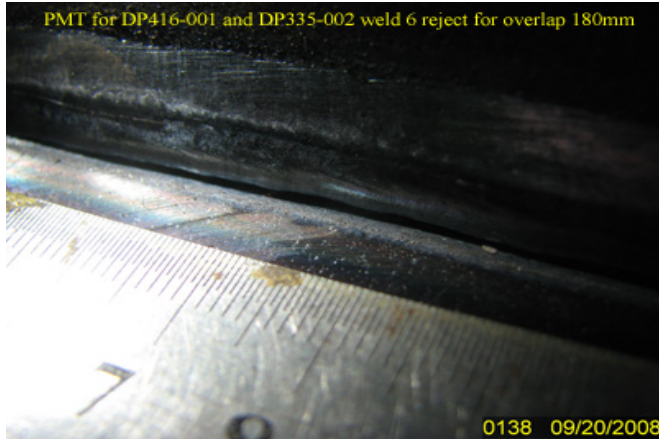
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found rejectable by ZPMC QC.

Heavy Machinery Shop Bay 2 :

Caltrans QA observed ZPMC performing GMAW in the 2F position on Skin A reinforcement plates welds ESD1-SA107 B/J 13 and 14, ESD1-SA237 27.



Summary of Conversations:

Only general conversations between QA and QC occurred this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 138 1694 2685, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer
